AGENDA

ICEMA
MEDICAL ADVISORY COMMITTEE

June 21, 2018

1300

Purpose: Information Sharing

Meeting Facilitator: Stephen Patterson

Timekeeper: Suzee Kolodzik

Record Keeper: Suzee Kolodzik

	AGENDA ITEM	PERSON(S)	DISCUSSION/ACTION
I.	Welcome/Introductions	Stephen Patterson	
II.	Approval of Minutes	Stephen Patterson	Discussion/Action
III.	Discussion/Action Items		
	A. Standing EMS System Updates		
	1. Trauma Program 2. STEMI Program 3. Stroke Program 4. SAC Update	1. Suzee Kolodzik/ Loreen Gutierrez 2. Suzee Kolodzik/ Loreen Gutierrez 3. Suzee Kolodzik/ Loreen Gutierrez 4. Kevin Parkes/ Tom Lynch	1. Discussion 2. Discussion 3. Discussion 4. Discussion
	B. EMS Trends		
	1. TXA Study Update 2. Out of Hospital Cardiac Arrest Initiative 3. Ketamine Study Update	1. Reza Vaezazizi/ Michael Neeki 2. Reza Vaezazizi 3. Reza Vaezazizi	1. Discussion 2. Discussion
	C. Dopamine Shortage	Reza Vaezazizi	Discussion/Action
	D. HEMS Utilization	Reza Vaezazizi	Discussion/Action
	E. Protocol Review Process	Pam Martinez	Discussion
	F. 2018 Skills Manual	Ann Sandez	Discussion/Action
IV.	Public Comment Period	Stephen Patterson	Discussion
V.	Future Agenda Items		
VI.	Next Meeting Date: August 23, 2018		
VII.	Adjournment		
VIII.	Closed Session		
	A. Case Reviews		
	B. Loop Closure Cases		

MINUTES

ICEMA
MEDICAL ADVISORY COMMITTEE

February 22, 2018

1300

AGENDA ITEM		DISCUSSION/FOLLOW UP	RESPONSIBLE PERSON(S)
I.	WELCOME/INTRODUCTIONS	Meeting was called to order at 1300.	Stephen Patterson
II.	APPROVAL OF MINUTES	The December 19, 2017, minutes were approved. Motion to approve. MSC: Seth Dukes/Susie Moss APPROVED Ayes: Paul Savino, Michael Neeki, Seth Dukes, Leslie Parham, Joe Powell, Susie Moss, Stephen Patterson, Kevin Parkes	Stephen Patterson
III.	DISCUSSION ITEMS		
	A. Standing EMS System Updates		
	1. Trauma Program	No update.	Suzee Kolodzik/ Loreen Gutierrez
	2. STEMI Program	No update.	Suzee Kolodzik/ Loreen Gutierrez
	3. Stroke Program	Discussed field triage for EMS personnel transporting to Thrombectomy Centers.	Suzee Kolodzik/ Loreen Gutierrez
	4. SAC Update	Committee requested that APOD patient criteria be expanded to include patients with hep lock and who received Zofran.	Michael Neeki
	B. EMS Trends		
	1. TXA Study Update	TXA study is being prepared for publication. Data will be presented at the EMS Commission meeting on March 21, 2018.	Reza Vaezazizi/ Michael Neeki
	2. Out of Hospital Cardiac Arrest Initiative	ImageTrend began uploading data into CARES registry starting January 1, 2018. Specialty hospitals in the ICEMA region have agreed to enter patient outcome into CARES registry. Resuscitation Academy, in partnership with HeartRescue, will be a regional approach between ICEMA and REMSA. It will be held in June at REMSA with a two (2) day format.	Reza Vaezazizi

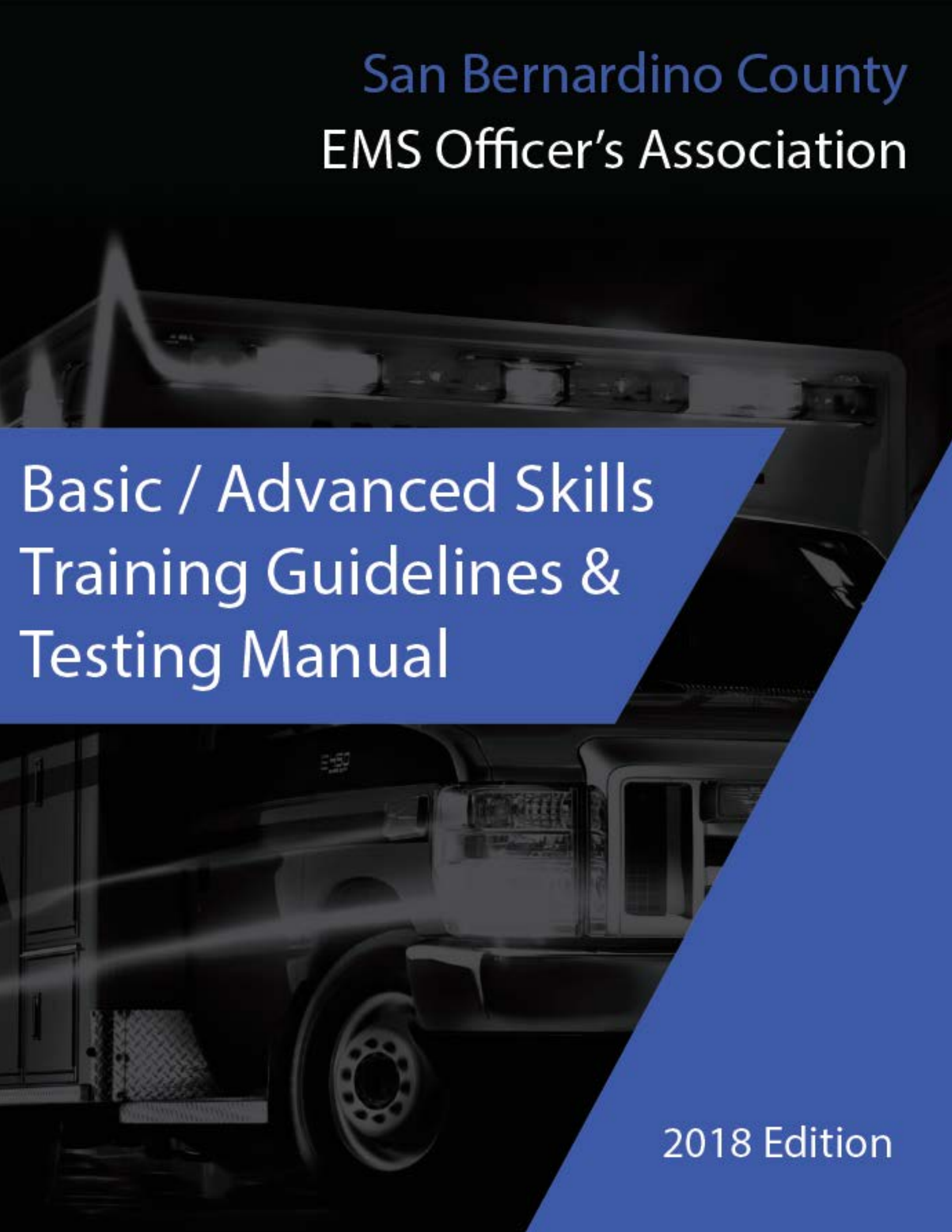
	C. Ketamine Trail Study	Ketamine Trial Study start date will be April 1, 2018.	Reza Vaezazizi
	D. APOD Review	Clarification memo regarding APOD patient criteria was sent out.	Reza Vaezazizi
	E. Nasotracheal Intubation	Nasotracheal Intubation data was presented and discussed. Motion to remove the skill from the ICEMA region. MSC: Michael Neeki/Paul Savino APPROVED Ayes: Paul Savino, Michael Neeki, Seth Dukes, Stephen Patterson, Kevin Parkes Nays: Leslie Parham, Joe Powell, Susie Moss	Stephen Patterson
	F. Behavioral Emergencies/Excited Delirium	Presented new behavioral emergencies protocol and discussed changes to ICEMA Reference #9070 - Applying Patient Restraints Guidelines. Protocols will be sent to the MAC members for review.	Reza Vaezazizi
	G. ePCR Quality Improvement Project	Discussed system-wide issue with incomplete or missing ePCRs. The Committee requested clarification on the ePCR requirements.	Reza Vaezazizi
V.	PUBLIC COMMENT		
VI.	FUTURE AGENDA ITEMS	- Mandatory Paramedic Skills Verification	
VII.	NEXT MEETING:	April 26, 2018	
VIII.	ADJOURNMENT	Meeting adjourned at 1448.	

Attendees:

NAME	MAC POSITION	EMS AGENCY STAFF	POSITION
☒ P. Brian Savino - LLUMC ☐ VACANT	Trauma Hospital Physicians (2)	☒ Reza Vaezazizi, MD	Medical Director
☐ Melanie Randall - LLUMC	Pediatric Critical Care Physician	☒ Tom Lynch	EMS Administrator
☐ VACANT ☐ Phong Nguyen - RDCH	Non-Trauma Base Physician s (2)	☐ Loreen Gutierrez	Specialty Care Coordinator
☐ Aaron Rubin - Kaiser	Non-Base Hospital Physician	☒ Ron Holk	EMS Coordinator
☒ Michael Neeki - Rialto FD (Chair)	Public Transport Medical Director	☒ Danielle Ogaz	Senior EMS Specialist
☒ Seth Dukes - AMR	Private Transport Medical Director	☒ Suzee Kolodzik	EMS Specialist
☐ VACANT	Fire Department Medical Director	☒ Amber Anaya	EMS Specialist
☐ Joy Peters - ARMC	EMS Nurses		
☒ Leslie Parham - Chino Valley FD	EMS Officers		
☒ Joe Powell - Rialto FD	Public Transport Medical Rep (Paramedic/RN)		
☒ Susie Moss - AMR	Private Transport Medical Rep (Paramedic/RN)		
☐ Lance Brown - LLUMC	Specialty Center Medical Director		
☐ VACANT	Specialty Center Coordinator		
☐ Troy Pennington - Mercy Air	Private Air Transport Medical Director		
☒ Stephen Patterson - Sheriff's Air Rescue	Public Air Transport Medical Director		
☐ Michael Guirguis - SB Comm Center	PSAP Medical Director		
☐ Lisa Davis - Sierra Lifeflight	Inyo County Representative		
☐ Rosemary Sachs	Mono County Representative		
☒ Kevin Parkes - SARH	SAC Liaison		
☐ Debbie Bervel - Sheriff's Air Rescue	ICEMA Medical Director Appointee		

San Bernardino County

EMS Officer's Association



Basic / Advanced Skills Training Guidelines & Testing Manual

2018 Edition

Foreword from EMS Officers

Greetings Colleagues,

This basic and advanced skills training guidelines and testing manual is for you! The San Bernardino County EMS Officer's association has created and supports this living and breathing document. This manual is supported by industry standards and resources (NREMT and ICEMA protocols/standards) utilized in educational institutions and organizations that set a national standard for Emergency Medical Services. As this is a living document, annual revisions will be updated based on feedback from users and administrators who utilize this for education and application purposes. Please don't hesitate to forward concerns to your respective EMS Officer representative to help uphold the industry standard for all.

Best Regards,

San Bernardino County EMS Officer's Association

Basic Life Support Skills **Table of Contents**

Basic Life Support Skills Cont. **Table of Contents**

Advanced Life Support Skills **Table of Contents**

12 Lead Electrography

INDICATIONS

Patient with complaint of chest pain, with suspected or at risk of having an myocardial infarction

CONTRAINDICATIONS (Relative)

- Uncooperative patient
- Life-threatening conditions
- 12 Lead will impede immediate patient care needs

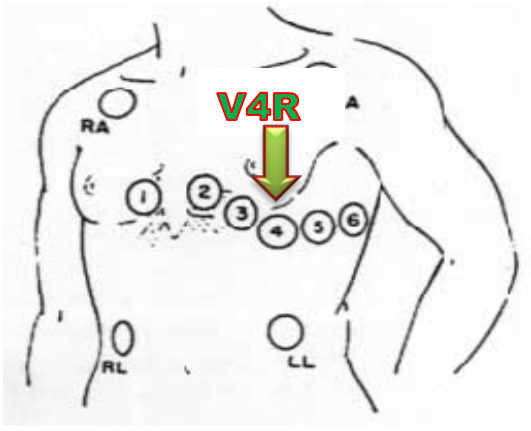
CONSIDERATIONS

Consider 12-lead ECG with atypical presentations (figure 2):

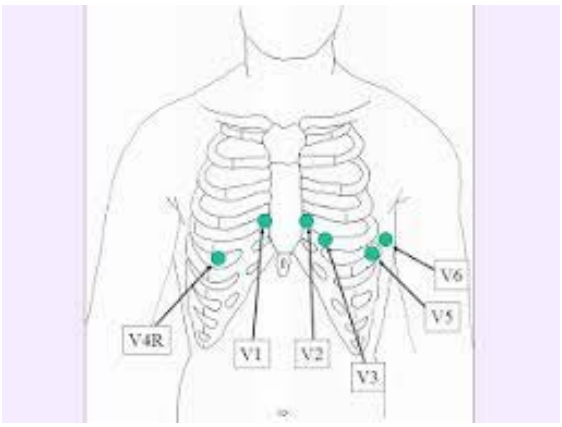
Elderly
Female
Diabetic
Unexplained or near syncope
Shortness of Breath
Generalized weakness (over fifty (50) years of age)
Profound weakness, acute onset
Upper abdominal discomfort

***** For suspected right sided MI, remove V4 lead and place it at the 5th intercostal space midclavicular line on the right side of the chest. Figure 1.***

Figure 1



http://www.ems12lead.com/2008/10/17/



http://nuclearcardiologyseminars.com/electrocardiography

12-lead-ecg-lead-placement-diagrams/

Figure 2

I Lateral	aVR	V1 Septal	V4 Anterior
II Inferior	aVL Lateral	V2 Septal	V5 Lateral
III Inferior	aVF Inferior	V3 Anterior	V6 Lateral

SITE	FACING	RECIPROCAL
SEPTAL	V1, V2	NONE
ANTERIOR	V3, V4	NONE
ANTEROSEPTAL	V1, V2, V3, V4	NONE
LATERAL	I, aVL, V5, V6	II, III, aVF
ANTEROLATERAL	I, aVL, V3, V4, V5, V6	II, III, aVF
INFERIOR	II, III, aVF	I, aVL
POSTERIOR	NONE	V1, V2, V3, V4

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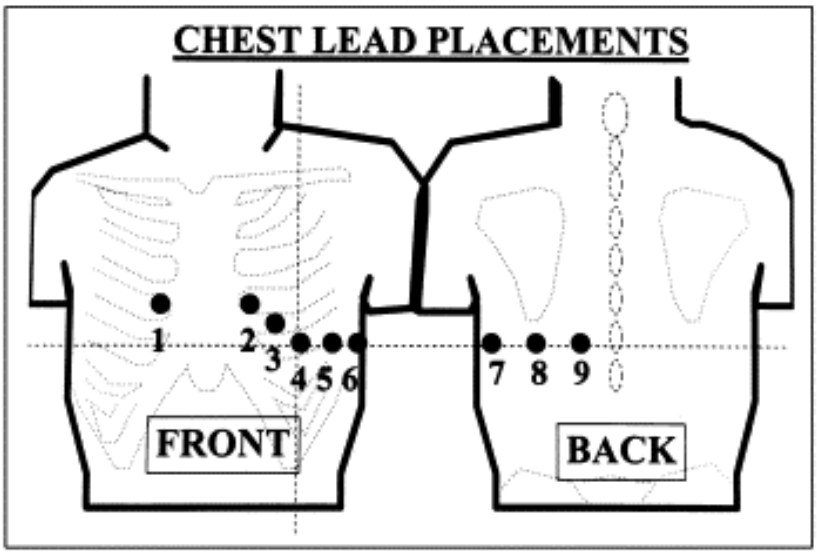
***15 Lead Placement**



12 Lead Electrography

Skills Test

Examinee : _____ Date:_____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- 12-lead electrodes
- Cardiac monitor with 12-lead capabilities
- Razor (as needed)

Assessment/Treatment indicators:

Indications	**Contraindications**
• Patient with complaint of chest pain, with suspected or at risk of having an myocardial infarction • Consider 12-lead ECG with atypical presentations: ▪ Elderly ▪ Female ▪ Diabetic ▪ Unexplained or near syncope ▪ Shortness of Breath ▪ Generalized weakness (over fifty (50) years of age) ▪ Profound weakness, acute onset ▪ Upper abdominal pain	• Uncooperative patient • Life-threatening conditions • Delay caused by obtaining ECG could compromise care of that patient • 12 lead will impede immediate patient care needs

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Explains procedure	☐	☐
5.	Places the patient in a preferred position of comfort (if the patient cannot tolerate being supine, obtain the ECG in Semi-Fowlers or a more upright position)	☐	☐
6.	Instructs the patient to place their arms down by their side and to relax their shoulders	☐	☐
7.	Makes sure the patient's legs are uncrossed	☐	☐
8.	Dries the skin if it's moist or diaphoretic	☐	☐

9.	Shaves any hair that interferes with electrode placement	☐	☐
10.	Places precordial lead electrodes to patient per manufacturer's directions (Figure 1)	☐	☐
11.	Records and print ECG findings per manufacturer's directions	☐	☐
12.	Paramedic interprets ECG, report and document findings (Figure 2) (Step 12 may be omitted with EMT only exam)	☐	☐
13.	Reassess/Document: • Patient • ECG findings • Patient response to intervention	☐	☐
Notes:			

Axial Spinal Immobilization of a Seated Patient

INDICATIONS

Suspected spinal injuries; complaints of spinal pain

Determine if the patient meets criteria for full axial spinal precautions by following the indicators of the following acronym (NSAID):

N – Neuro deficit present?
S – Spinal tenderness?
A – Altered mental status?
I – Intoxication?
D – Distracting injury?

CONTRAINDICATIONS

- No contraindications

CONSIDERATIONS

For pediatric patients: If the level of the patient's head is greater than that of the torso, use an approved pediatric spine board with a head drop or arrange padding in the board to keep the entire lower spine and pelvis in line with the cervical spine and parallel to the board.

For patients being placed on a backboard from the standing or sitting position, consider providing comfort by placing padding on the board.

Any elderly or other adult patients, who may have a spine that is normally flexed forward, should be stabilized in the patient's normal anatomical position considering spinal curvatures.

When a pregnant patient is placed in axial spinal stabilization, the board should be elevated at least four (4) inches on the left side to decrease pressure on the Inferior Vena Cava.

Certain patients may not tolerate normal stabilization positioning due to the location of additional injuries. These patients may require stabilization in their position of comfort. Additional material may be utilized to properly stabilize these patients while providing for the best possible axial spinal alignment.

ALS personnel may remove patients placed in axial spinal stabilization by first responders and BLS personnel if the patient does not meet the NSAID indicators after a complete assessment and documentation on the patient care report should be completed.

Axial Spinal Immobilization of a Seated Patient

Skills Test

Examinee : _____ Date:_____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- Cervical collar
- Backboard
- Padding (as indicated)
- Backboard straps
- Spinal motion restriction device

Assessment/Treatment indicators:

Indications	**Contraindications**
• Per NSAID acronym	• Per NSAID acronym

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Explains procedure	☐	☐
5.	Directs assistant to place/maintain head in the neutral, in-line position	☐	☐
6.	Reassesses motor, sensory, and circulatory function in each extremity	☐	☐
7.	Applies appropriately sized extrication/cervical collar	☐	☐
8.	Positions the immobilization device appropriately	☐	☐
9.	Directs movement of the patient onto the backboard without compromising the integrity of the spine	☐	☐
10.	Applies padding to voids between the torso and the device as necessary	☐	☐
11.	Immobilizes the patient's torso to the device	☐	☐
12.	Evaluates and pads behind the patient's head as necessary	☐	☐
13.	Immobilizes the patient's head to the device	☐	☐
14.	Secures the patient's arms and legs to the device	☐	☐
15.	Reassess/Document: • Patient • Reassessment of motor, sensory, and circulatory function in each extremity • Patient response/tolerance to intervention	☐	☐

Notes:

Axial Spinal Immobilization of a Supine Patient

INDICATIONS

Determine if the patient meets criteria for full axial spinal precautions by following the indicators of the following acronym (NSAID):

N – Neuro deficit present?
S – Spinal tenderness?
A – Altered mental status?
I – Intoxication?
D – Distracting injury?

CONTRAINDICATIONS

- Penetrating trauma without any NSAID indicators are not candidates for spinal immobilization using long board.

CONSIDERATIONS

Maintain spinal alignment on the gurney, or using spinal axial immobilization on an awake, alert and cooperative patient, without the use of a rigid spine board.

For patients being placed in spinal immobilization, provide comfort by placing padding on board

For standing patients with the complaint of neck or back pain; consider placement on a backboard while the patient remains in the standing position, executing the standing takedown technique.

For pediatric patients: use an approved pediatric spine board with a head drop or arrange padding on the board to keep the entire lower spine and pelvis in line with the cervical spine and parallel to the board. All intubated neonatal and pediatric patients should be placed in full axial spinal immobilization.

Any elderly or other adult patients should be stabilized in patient's normal anatomical position.

Pregnant patients placed in axial spinal stabilization, board should be elevated at least four (4) inches on the left side to decrease pressure on the Inferior Vena Cava.

Certain patients may not tolerate normal stabilization positioning due to the location of additional injuries. These patients may require stabilization in their position of comfort.

ALS personnel may remove patients placed in axial spinal stabilization by first responders and BLS personnel if the patient does not meet the NSAID indicators after assessment.

** ***Age of the patient, co-morbidities (osteoporosis, etc.) should always be a priority in the decision-making process.***

** ***The long backboard (LBB) is an extrication tool, whose purpose is to facilitate the transfer of a patient to a transport stretcher and is not intended, or appropriate for achieving spinal stabilization. Judicious application of the LBB for purposes other than extrication necessitates that healthcare providers ensure the benefits outweigh the risks. If a LBB is applied for any reason, patients should be removed as soon as it is safe and practical. LBB does not need to be reapplied on interfacility transfer (IFT) patients.***

Axial Spinal Immobilization of a Supine Patient

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- Cervical collar
- Backboard
- Padding (as indicated)
- Backboard straps
- Head bed/ towel rolls / head blocks

Assessment/Treatment indicators:

Indications	**Contraindications**
• Per NSAID acronym	• Per NSAID acronym • Penetrating trauma without any NSAID indicators

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Explains procedure	☐	☐
5.	Directs assistant to place/maintain head in the neutral, in-line position	☐	☐
6.	Reassesses motor, sensory, and circulatory function in each extremity	☐	☐
7.	Applies appropriately sized extrication/cervical collar	☐	☐
8.	Positions the immobilization device appropriately	☐	☐
9.	Directs movement of the patient onto the backboard without compromising the integrity of the spine	☐	☐
10.	Applies padding to voids between the torso and the device as necessary	☐	☐
11.	Immobilizes the patient's torso to the device	☐	☐
12.	Evaluates and pads behind the patient's head as necessary	☐	☐
13.	Secures the patient's arms and legs to the device	☐	☐
14.	Immobilizes the patient's head to the device	☐	☐
15.	Reassess/Document: • Patient • Motor, sensory, and circulatory function in each extremity • Patient response/tolerance to intervention	☐	☐

Notes:

Bleeding Control/Shock Management

INDICATIONS

Patient with blunt or penetrating trauma with active hemorrhage

CONTRAINDICATIONS (Relative)

- No contraindications

CONSIDERATIONS

Cut and expose wound
Consider proper equipment needed for specific hemorrhage control
Consider appropriate manufacturer's guidelines for specific tourniquet application
Consider proper equipment needed for the treatment of shock
Destination, time and specialty center required, need for HERT team

** ***Consider oxygen administration (follow oxygen administration guidelines)***

Bleeding Control/Shock Management

Skills Test

Examinee : _____ Date:_____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- BSI equipment
- Absorbent material
- Bandaging material
- Oxygen/ Oxygen delivery system
- Blanket
- Tourniquets (Swat-T, Soft-T)
- Quik-clot for junctional wounds
- Israli bandages – pressure dressings

Assessment/Treatment indicators:

Indications	**Contraindications**
• Signs of active hemorrhage	• No contraindications

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	Applies direct pressure to the wound	☐	☐
	The examiner advises “The wound continues to bleed.”		
3.	Applies tourniquet appropriately	☐	☐
	The examiner advises “The patient is now exhibiting signs and symptoms of hypoperfusion.”		
4.	Properly positions the patient	☐	☐
5.	Administers high concentration oxygen (According to NAEMT and/or ICEMA protocol)	☐	☐
6.	Initiates steps to prevent heat loss from the patient	☐	☐
7.	Indicates the need for immediate transport	☐	☐
8.	Reassess/Document: • Patient • Motor, sensory, and circulatory function in each extremity • Patient response/tolerance to intervention	☐	☐

Notes:

Blood Glucose Analysis

INDICATIONS

- Altered mental status
- Neurological dysfunction
- History of diabetes
- Vague or general symptoms or complaints
- Need to reassess following treatment of hypoglycemia

CONTRAINDICATIONS (Relative)

Recognize contraindications to blood sampling site selection:

- Signs of local infection
- Wounds or bleeding

CONSIDERATIONS

Reassess unusual and/or unexpected glucometer results

Blood Glucose Analysis

Skills Test

Examinee: _____ Date:_____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- BSI Equipment / PPE
- Glucometer
- Alcohol preps
- Sharps container
- Lancet(s)
- Bandage

Assessment/Treatment indicators:

Indications	**Contraindications (Relative)**
• Altered Mental Status • Neurological dysfunction • History Diabetes • Vague or General symptoms or complaints • Need to reassess following treatment of hypoglycemia	• Local infection, Wounds or bleeding at blood sampling site

	Procedure:	**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Gathers appropriate equipment glucometer, test strip, lancet, alcohol prep	☐	☐
4.	Explains procedure to patient	☐	☐
5.	Prepares glucometer: inserts test strip, ensure glucometer is ready to receive blood	☐	☐
6.	Select appropriate site Adult / Pediatric • Fingertip side Infant (less than one year) • Heel of foot	☐	☐
7.	Use alcohol to clean site, allow site to dry completely before utilizing lancet	☐	☐
8.	Obtain blood sample: prick the site with lancet	☐	☐
9.	Allow blood drop to form, transfer blood sample to the test strip following manufacturer's guidelines	☐	☐

10.	Place lancet in sharps container & apply bandage to site	☐	☐
11.	Announce / Document glucometer result	☐	☐

Notes:

Cardiac Arrest and AED

INDICATIONS

Cardiac/Respiratory Arrest

CONTRAINDICATIONS

- DNR
- POLST directives
- End of Life Option Act

CONSIDERATIONS:

Ensure enough space to properly perform CPR with several rescuers
Remove patient from standing water
Place patient in supine position
Determine probable cause of the arrest

** ***AED patches should not be placed over implanted medical devices, jewelry or transdermal medication patches***

Cardiac Arrest and AED

Skills Test

Examinee: _____ Date:_____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- PPE
- AED

Assessment/Treatment indicators:

Indications	**Contraindications**
• Cardiac/Respiratory arrest	• DNR • POLST directives • End of Life Option Act

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Explains procedure	☐	☐
5.	Attempts to obtain information about event from bystanders	☐	☐
6.	Checks patient responsiveness	☐	☐
7.	Assesses patient for signs of breathing (agonal, apneic, gasping)	☐	☐
8.	Checks carotid pulse for no less than 5, no more than 10 seconds	☐	☐
9.	Immediately begins chest compressions with appropriate rate and depth while allowing for complete chest recoil	☐	☐
10.	Requests additional assistance (as needed)	☐	☐
11.	Performs 2 minutes (5 cycles) of high quality (1 or 2-person) CPR	☐	☐
12.	After 2 minutes, switches out rescuer performing compressions	☐	☐
13.	When AED arrives, first rescuer turns it on	☐	☐
14.	Follows initial AED prompts	☐	☐
15.	Correctly attaches pads to patient ** ***Avoids placing pads over implanted medical devices or medication patches***	☐	☐
16.	Follows additional AED prompts to clear and analyze rhythm	☐	☐
17.	If shock advised, ensures the patient is clear of all bystanders and provides shock per AED instructions	☐	☐

18.	Ensures effective chest compressions are immediately resumed	☐	☐
19.	Reassess/Document: • Patient • Patient response/tolerance to interventions	☐	☐
Notes:			

Intramuscular Medication Administration

INDICATIONS

- Unable to establish IV for medication administration
- Desired route for administration of medication

CONTRAINDICATIONS (Relative)

If any of the following are noted at the site select a different site:

- Masses
- Tenderness
- Bruising
- Infection
- Abrasions
- Swelling

Intramuscular Medication Administration

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- BSI equipment
- Syringe
- Alcohol Prep
- Safety Needles (*20-25g; 5/8 to 1 ½ inches in length*)
- Bandage

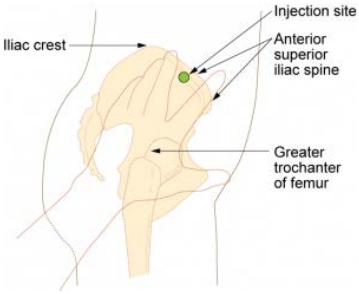
Assessment/Treatment indicators:

Indications	**Contraindications (relative to site)**
• Unable to establish IV for medication administration • Desired route for administration of medication	• Masses • Tenderness • Bruising • Infection • Abrasions • Swelling

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindication	☐	☐
3.	Prepares and checks equipment	☐	☐
4.	Explains procedure to patient/family	☐	☐
5.	Inspects desired site for contraindications	☐	☐
6.	Chooses appropriate medication	☐	☐
7.	Inspect site for sufficient muscle mass	☐	☐
8.	Withdraws medication	☐	☐
8a.	Verbalizes no more than recommended solution per site: **Deltoid** (Upper Arm) (**2ml**) **Vastus Lateralis** (Anterior Thigh) (**3mL**) **Ventrogluteal** (Lateral Hip) (**3mL**)	☐	☐
9.	Position patient and prepare site	☐	☐
10.	Remove air from needle (Push slightly on the plunger to bring a drop of solution to the level of the bevel of the needle)	☐	☐
11.	Support the muscle to be injected (Without contaminating the site spread skin tight with non-dominant hand)	☐	☐
12.	Insert needle with a dart like motion into site at 90° angle and stabilize hub of syringe and aspirate for no blood return (no blood return indicates proper placement)	☐	☐

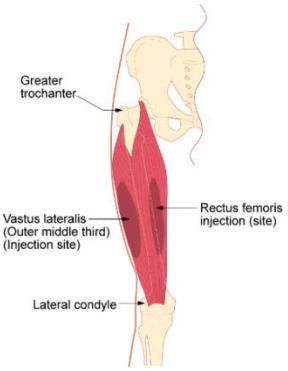
13.	Slowly inject medication to reduce pain and tissue trauma	☐	☐
14.	Withdraw needle and properly disposes needle and syringe	☐	☐
15.	Applies direct pressure, massages site and apply bandage as needed	☐	☐
13.	Reassess/Document: • Patient • Medication and dosage given • Administration success • Patient response/tolerance to intervention	☐	☐
Notes:			

Ventrogluteal



Recommended needle length is based on patient weight and body mass index. Thin adult may require a 16 mm to 25 mm (5/8 to 1 inch) needle, average adult may require a 25 mm (1 inch) needle, larger adult (over 70 kg) may require a 25 mm to 38 mm (1 to 1 1/2 inch) needle. Children and infants will require shorter needles.

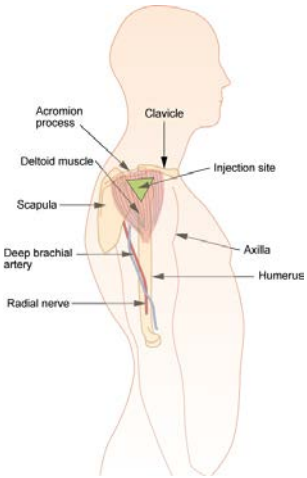
For the ventrogluteal muscle of an average adult, give up to 3 ml of medication.



Vastus Lateralis

Recommended needle length for an adult is 25 mm to 38 mm (1 to 1 1/2 inch). A smaller gauge needle (22 to 25 gauge) should be used with children.

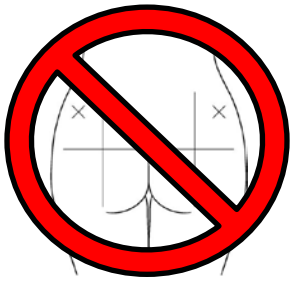
The maximum amount of medication for a single injection is 3 ml.



Deltoid

Select needle length based on age, weight, and body mass. In general, for an adult male weighing 60 to 118 kg (130 to 260 lbs), a 25 mm (1 inch) needle is sufficient. For women under 60 kg (130 lbs), a 16 mm (5/8 inch) needle is sufficient, while for women between 60 and 90 kg (130 to 200 lbs), a 25 mm (1 inch) needle is required. A 38mm (1 1/2 inch) length needle may be required for women over 90 kg (200 lbs) for a deltoid IM injection. The maximum amount of medication for a single injection is 1 ml.

Dorsalgluteal muscle (Gluteus Maximus)



NEVER give an IM injection in the dorsogluteal muscle.

If the needle hits the sciatic nerve, the patient may experience **partial or permanent** paralysis of the leg.

AJN, American Journal of Nursing, April 1996, Volume: 96 Number 4, page 53 retrieved from: https://www.nursingcenter.com/journalarticle?Article_ID=102892&Journal_ID=54030&Issue_ID=54821

https://opentextbc.ca/clinicalskills/chapter/6-8-iv-push-medications-and-saline-lock-flush/

Data source: Berman & Snyder, 2016; Davidson & Rourke, 2014; Ogston-Tuck, 2014a; Perry et al., 2014

Intranasal Medication Administration

INDICATIONS

Unable to establish IV for medication administration

Desired route for administration of medication

CONTRAINDICATIONS (Relative)

- Significant nasal trauma
- Significant amount of blood or dried mucous discharge

Intranasal Medication Administration

Skills Test

Examinee: _____ Date:_____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- BSI Equipment
- Mucosal Atomization Device (MAD) or other IN medication device

Assessment/Treatment indicators:

Indications	**Contraindications**
• Unable to establish IV for medication administration • Desired route for administration of medication	• Significant nasal trauma • Significant amount of blood or dried mucous discharge

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Explains procedure to patient/family	☐	☐
5.	Inspects the nostril for significant amount of mucus and/or blood	☐	☐
6.	Chooses appropriate medication	☐	☐
7.	Withdraws medication	☐	☐
8.	Places the administration end of IN device in the nostril (If repeating dose, if possible, use opposite nostril)	☐	☐
	8a. Verbalizes no more than 1mL of solution should be administered in each nostril	☐	☐
9.	Reassess/Document: • Patient • Medication and dosage given • Administration success • Patient response/tolerance to intervention	☐	☐

Notes:

Joint Immobilization

INDICATIONS

Signs of possible dislocation or fracture of a joint including pain, deformity, crepitus, or swelling to a joint

CONTRAINDICATIONS (Relative)

- No contraindications

CONSIDERATIONS

Cut and expose affected extremity
Prepare equipment for joint immobilization

Joint Immobilization

Skills Test

Examinee: _____ Date:_____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- BSI equipment
- Splint, roller bandage, and/or tape
- Padding

Assessment/Treatment indicators:

Indications	**Contraindications**
• Signs of possible dislocation or fracture of joint deformity, crepitus, or swelling of joint.	• No contraindications

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	Directs application of manual stabilization of injury	☐	☐
3.	Assesses distal motor, sensory, or circulatory functions in the injured extremity, compares with uninjured extremity	☐	☐
	The examiner advises "Motor, sensory and circulatory functions are present and normal."		
4.	Selects the proper splinting material	☐	☐
5.	Immobilizes the site of injury	☐	☐
6.	Immobilizes the bone above the injury site	☐	☐
7.	Immobilizes the bone below the injury site	☐	☐
8.	Secures the entire injured extremity is secured	☐	☐
9.	Reassesses distal motor, sensory and circulatory functions in the injured extremity	☐	☐
10.	Reassess/Document: • Patient, pain scale • Patient response/tolerance to interventions	☐	☐
	The examiner advises "Motor, sensory and circulatory functions are present and normal.		

Notes:

King Airway Device (Perilaryngeal)

INDICATIONS

Use of King Airway may be performed on those patients who meet **ALL** of the following:

Unresponsive and apneic (less than 6 breaths per minute)
No gag reflex
Appropriately sized airway

Height	Weight	Size	Connector Color	Recommended Air Volume
• 35-45”	or 12-15kg:	Size 2	GREEN	23-35mL
• 41-51”	or 25-35kg:	Size 2.5	ORANGE	30-40 mL
• 48-60”	or 4-5 feet:	Size 3	YELLOW	60 mL
• 60-72”	or 5-6 feet:	Size 4	RED	80 mL
• ≥ 72”	or ≥6 feet:	Size 5	PURPLE	90 mL

CONTRAINDICATIONS

- Conscious patients with an intact gag reflex
- Known ingestion of caustic substances
- Suspected foreign body airway obstruction (FBAO)
- Facial and/or esophageal trauma
- Patients with known esophageal disease (cancer, varices, surgery, etc.)

CONSIDERATIONS

No considerations

King Airway Device (Perilaryngeal)

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- Appropriately sized King LTS-D
- Syringe
- BVM
- Water based lubricant

Assessment/Treatment indicators:

Indications	**Contraindications**
Use of King Airway may be performed on those patients who meeting **ALL** of the following: • Unresponsive and apneic (less than 6 breaths per minute) • No gag reflex • Appropriately sized airway	• Conscious patients with an intact gag reflex • Known ingestion of caustic substances • Suspected foreign body airway obstruction (FBAO) • Facial and/or esophageal trauma • Patients with known esophageal disease (cancer, varices, surgery, etc.)

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Explains procedure	☐	☐
5.	Chooses the appropriately sized King Airway based on patient height	☐	☐
6.	Tests cuff inflation system by injecting the maximum recommended volume of air into the cuffs (Prior to insertion, disconnect valve actuator from inflation valve and remove all the air from both cuffs)	☐	☐
7.	Applies water-based lubricant to the beveled distal tip and posterior aspect of the tube taking care to avoid introduction of lubricant in or near the ventilator openings	☐	☐
8.	Pre-oxygenates patient with 100% oxygen through BVM	☐	☐
9.	Positions patient in the “sniffing position”, if no cervical spine injury suspected	☐	☐
10.	Holds the KING LTS-D at the connector with dominant hand (with non-dominate hand, hold mouth open and apply chin lift)	☐	☐
11.	With the KING LTS-D rotated laterally 45-90%, introduces tip into mouth and advance behind base of tongue	☐	☐
12.	Rotates the tube back to the midline as the tip reaches the posterior wall of the pharynx	☐	☐
13.	Advances KING LTS-D until base of connector is aligned with teeth or gums without exerting excessive force	☐	☐

14.	Holding the KLT 900 cuff pressure gauge in non-dominant hand, inflates cuffs of the KING LTS-D to the minimum volume necessary to seal the airway at the peak ventilator pressure	☐	☐
15.	Attaches the breathing circuit to the 15 mm connector of the KING LTS-D	☐	☐
16.	While gently bagging the patient to assess ventilation, simultaneously withdraws the airway until ventilation is easy and free flowing	☐	☐
17.	Reference marks are provided at the proximal end of the KING LTS-D which when aligned with the upper teeth given an indication of the depth of insertion	☐	☐
18.	Confirms proper position by auscultation, chest movement and/or verification of CO_2 by capnography	☐	☐
19.	Adjusts cuff inflation to seal volume	☐	☐
20.	Secures KING LTS-D to patient	☐	☐
21.	Reassess/Document: • Patient • Airway insertion • Depth of insertion • Confirmation of proper insertion (auscultation, chest movement, $ETCO_2$) • Patient response/tolerance to intervention	☐	☐
Notes:			

Neonate Resuscitation Post Delivery

INDICATIONS

Cardiac/Respiratory Arrest post delivery

CONTRAINDICATIONS

- Known still birth

CONSIDERATIONS:

Two patients
Have second EMS personnel support mother emotionally
Continued medical support for mother

Neonate Resuscitation Post Delivery

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- BSI Equipment / PPE
- Obstetric Kit
- Infant BVM
- Oxygen
- OPA

Assessment/Treatment indicators:

Indications	**Contraindications**
• Cardiac / Respiratory arrest post-delivery to neonate	• Known still birth

Procedure:		**Yes**	**No**
1.	After birth assess new born: good tone, breathing or crying Check heart rate >60 if <60 continue to #3	☐	☐
2.	If infant is breathing appropriate rate or crying: Warm and maintain normal temperature, position airway, clear secretions if needed, dry. Then give to mother for continued care.	☐	☐
3.	If not breathing or agonal respirations Airway: Open airway, suction if needed, position Breathing: Provide oxygen in high concentration, nonrebreather or assist ventilations as indicated (e.g., BVM) Circulation: Assess perfusion, perform chest compressions as indicated (i.e. HR <60/min with poor perfusion). All rates and procedures shall adhere to AHA guidelines.	☐	☐
4.	Emotional support to mother and family.	☐	☐
5.	Continue to reassess and transport; keep infant warm.	☐	☐

Notes:

OB/Emergency Childbirth

INDICATIONS

Patient with complaint of severe abdominal pain and signs of imminent birth

CONTRAINDICATIONS (Relative)

Consider rapid transport if the following is found:

- Mother has uncontrolled hemorrhage with no imminent signs of delivery
- Limb or cord presentation is visualized at the vaginal opening

CONSIDERATIONS:

Assess the patient by asking the following questions:

a) Have you had prenatal care?
b) Have you had any past pregnancies?
c) How many live deliveries have you had in the past?
d) What is your expected due date?
e) Do you have the urge to bare down?
f) Have you had excessive fluid; BOW broken or plug passed?
g) What have been the length and frequency of contractions?
h) Are there any expected complications?

Consider preparing for in place delivery if the following is found:

Mother has the urge to push
Mother states water has broken
Bulging or crowning of the perineum is noted
Contractions are less than three minutes apart lasting 30 seconds or longer

Place the patient in a supine or semi-Fowler's position

Instruct the patient to focus on breathing and notify you when contractions start and stop

OB/Emergency Childbirth

Skills Test

Examinee: _____ Date:_____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- BSI equipment
- Obstetric kit

Assessment/Treatment indicators:

Indications	**Contraindications**
• Signs of imminent delivery • History of pregnancy with urge to push or bear down	• Limb presentation at vaginal opening • Respiratory or cardiac failure

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Asks patient appropriate assessment questions	☐	☐
4.	Explains and reassures the need to check for crowning or abnormal bleeding	☐	☐
5.	Observes for presentation of prolapsed cord or abnormal presentation	☐	☐
6.	Opens OB kit, cleans and drapes the area, being sure to keep a sterile zone	☐	☐
7.	Appropriately dons sterile gloves	☐	☐
8.	Explains procedure to patient before placing one hand to the baby's head applying gentle pressure to prevent explosive birth	☐	☐
9.	Uses second hand to apply gentle pressure to the perineum to prevent tearing of the opening	☐	☐
10.	Observes for nuchal cord	☐	☐
	The examiner advises "The cord is wrapped around the baby's neck."		
11.	Loosens and slips cord over baby's head	☐	☐
12.	Suctions mouth, then nose (once head is delivered)	☐	☐
13.	Applies gentle upward and downward pressure to head to help release the upper shoulders	☐	☐
14.	Once delivery is complete, holds baby securely	☐	☐
15.	Notes the time of birth and initial A-P-G-A-R	☐	☐
	The examiner advises "The baby is out, has a pulse, but is not breathing."		
16.	Provides tactile stimulation while drying the baby and rubbing the feet	☐	☐
	The examiner notifies "The baby is now crying."		

17.	Wraps the baby in a blanket, places hat on baby's head for warmth	☐	☐
18.	Verifies cord is no longer pulsating, clamps cord approximately 6 and 8 inches away from baby, verbalizing the cutting of the cord	☐	☐
19.	Gives baby to mother/encourages bonding and warmth	☐	☐
20.	Massages fundus, states why this is necessary	☐	☐
21.	Mother delivers placenta; places placenta in biohazard safe bag	☐	☐
22.	Places sanitary pad; have mom lower and close legs and assume position of comfort	☐	☐
23.	Addresses the need to observe and treat possible bleeding control of mother	☐	☐
24.	Reassess/Document: • Patient • Newborn, document A-P-G-A-R at 1 and 5 minutes	☐	☐

Apgar Scoring System

Indicator		0 Points	1 Point	2 Points
A	Activity (muscle tone)	Absent	Flexed arms and legs	Active
P	Pulse	Absent	Below 100 bpm	Over 100 bpm
G	Grimace (reflex irritability)	Floppy	Minimal response to stimulation	Prompt response to stimulation
A	Appearance (skin color)	Blue; pale	Pink body, Blue extremities	Pink
R	Respiration	Absent	Slow and irregular	Vigorous cry

**** Assess Apgar at 1 and 5 minutes on all newborns**

https://www.abclawcenters.com/practice-areas/diagnostic-tests/apgar-score-for-assessment-of-the-newborn/

Oxygen Administration

INDICATIONS

Patient complains of shortness of breath and/or chest pain

Signs and symptoms of chronic pulmonary disease, shortness of breath, coughing, wheezing, desaturation, pursed lip breathing, anxiety, accessory muscle use, cyanosis, decreased breath sounds, or ALOC

CONTRAINDICATIONS

- No contraindications, be cautious of potential for hyper-oxygenation

CONSIDERATIONS

Oxygen needs of the patient
Verbalizes oxygen parameters set forth by ICEMA:

- Hypoxia: Titrate 0_2 at lower rate to maintain $SP0_2$ at 94%
  - **Verbalizes understanding: No 0_2 for $SP0_2$ >95%**

- COPD: Titrate 0_2 at lower rate to maintain $SP0_2$ at 90%
  - **Verbalizes understanding: No 0_2 for $SP0_2$ >91%**

Oxygen Administration

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- PPE
- Nasal cannula, simple mask or Non-rebreather mask
- Oxygen tank
- Oxygen regulator
- Monitor with SpO2 capabilities

Assessment/Treatment indicators:

Indications	**Contraindications**
• Patient complains of shortness of breath and/or chest pain • Signs and symptoms of chronic pulmonary disease, shortness of breath, coughing, wheezing, desaturation, pursed lip breathing, anxiety, accessory muscle use, cyanosis, decreased breath sounds, or ALOC	• No contraindications

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Checks the "five patient rights, plus one" • Right patient • Right medication **D**-Dose/Drug • Right dose **I**- Integrity of packaging • Right route **C**-Clarity of solution • Right time **E**-Expiration Date • Allergies	☐	☐
5.	Explains procedure	☐	☐
6.	Gathers appropriate equipment (i.e. oxygen tank, nasal cannula, simple mask, non-rebreather mask)	☐	☐
7.	Cracks valve on the oxygen tank	☐	☐
8.	Assembles the regulator to the oxygen tank	☐	☐
9.	Opens the oxygen tank valve	☐	☐
10.	Checks the oxygen tank pressure	☐	☐
11.	Checks for leaks	☐	☐
12.	Attaches (nasal cannula, simple or non-rebreather mask) to correct port of regulator	☐	☐
13.	Adjusts regulator to ensure oxygen flow rate appropriately per delivery device • Nasal cannula – 1 to 6 LPM • Simple mask – 8 to 12 LPM	☐	☐

	• Non-rebreather mask – 6 to 15 LPM		
14.	Attaches adjunct to patients face and adjusts to patient comfort	☐	☐
15.	Reassess/Document: • Patient • Lung sounds • SpO2 and CO_2 monitoring • Patient tolerance/response to intervention	☐	☐
Notes:			

Patient Assessment/Management-MEDICAL

INDICATIONS

Patient with a medical complain

CONTRAINDICATIONS (Relative)

- No contraindications

CONSIDERATIONS

Considers stabilization of the spine as needed

Patient Assessment/Management-MEDICAL

Skills Test

Examinee: _____ Date:_____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- BSI Equipment

Assessment/Treatment indicators:

Indications	**Contraindications**
• Patient with a medical complaint	• No contraindications

Procedure:		**Yes**	**No**
	SCENE SIZE-UP		
1.	Scene safety awareness/PPE usage	☐	☐
2.	Determines the scene/situation is safe	☐	☐
3.	Determines the nature of illness	☐	☐
4.	Determines the number of patients	☐	☐
5.	Requests additional EMS assistance if necessary	☐	☐
6.	Considers stabilization of the spine	☐	☐
	PRIMARY SURVEY/RESUSCITATION		
7.	Verbalizes general impression of the patient	☐	☐
8.	Determines responsiveness/level of consciousness (AVPU)	☐	☐
9.	Determines chief complaint/apparent life-threats	☐	☐
10.	Assesses airway and breathing • Assures adequate ventilation • Initiates appropriate oxygen therapy	☐	☐
11.	Assesses circulation • Assesses for and controls major bleeding • Checks pulse • Assesses skin (color, temperature or condition)	☐	☐
12.	Identifies patient priority and makes treatment/transport decision	☐	☐
	HISTORY TAKING		
13.	Obtains history of the present illness • Onset • Provocation • Quality • Radiation • Severity • Time • Clarifying questions of associated signs and symptoms related to O-P-Q-R-S-T	☐	☐

14.	Obtains or attempts to obtain past medical history • Signs/Symptoms • Allergies • Medications • Past pertinent history • Last oral intake • Events leading to present illness	☐	☐
SECONDARY ASSESSMENT			
15.	Assesses affected body part/system • Cardiovascular • Neurological • Integumentary • Reproductive • Pulmonary • Musculoskeletal • GI/GU • Psychological/Social	☐	☐
VITAL SIGNS			
16.	Obtains or delegates the blood pressure, pulse, respiratory rate, quality and effort	☐	☐
17.	States field impression of patient	☐	☐
18.	Interventions (verbalizes proper interventions/treatment)	☐	☐
REASSESSMENT			
19.	Reassess/Document: • Patient • Changes in patient's condition or vital signs • Patient response/tolerance to assessment and interventions	☐	☐
20.	Provides accurate verbal report to arriving EMS unit	☐	☐
Notes:			

Patient Assessment/Management-TRAUMA

INDICATIONS

Patient with blunt or penetrating trauma

CONTRAINDICATIONS (Relative)

- No contraindications

CONSIDERATIONS

Considers stabilization of the spine

Patient Assessment/Management-TRAUMA

Skills Test

Examinee: _____ Date:_____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- BSI Equipment

Assessment/Treatment indicators:

Indications	**Contraindications**
• Patient with possible or confirmed blunt or penetrating trauma	• No contraindications

	Procedure:	**Yes**	**No**
SCENE SIZE-UP			
1.	Scene safety awareness/PPE usage	☐	☐
2.	Determines the scene/situation is safe	☐	☐
3.	Determines the mechanism of injury	☐	☐
4.	Determines the number of patients	☐	☐
5.	Requests additional EMS assistance if necessary	☐	☐
6.	Considers axial spinal stabilization, delegates as needed	☐	☐
PRIMARY SURVEY/RESUSCITATION			
7.	Verbalizes general impression of the patient	☐	☐
8.	Determines responsiveness/level of consciousness	☐	☐
9.	Determines chief complaint/apparent life-threats	☐	☐
10.	Airway • Opens and assesses • Inserts adjunct as indicated	☐	☐
11.	Breathing • Assesses breathing • Assures adequate ventilation • Initiates appropriate oxygen therapy • Manages any injury which may compromise breathing/ventilation	☐	☐
12.	Circulation • Checks pulse • Assesses skin (color, temperature or condition) • Assesses for and controls major bleeding if present • Initiates shock management (positions patient properly, conserves body heat)	☐	☐

13.	Calculates GCS	☐	☐
14.	Identifies patient priority and makes treatment/transport decision (based upon calculated GCS)	☐	☐
HISTORY TAKING			
15.	Attempts to obtain SAMPLE history	☐	☐
SECONDARY ASSESSMENT			
16.	Head • Inspects and palpates scalp and ears, mastoid areas • Assesses eyes, pupils • Inspects mouth, nose and facial area	☐	☐
17.	Neck • Checks position of trachea • Checks jugular veins • Palpates cervical spine	☐	☐
18.	Chest • Inspects and palpates chest • Auscultates lung sounds	☐	☐
19.	Abdomen/pelvis • Inspects and palpates abdomen • Assesses pelvis • Verbalizes assessment of genitalia/perineum as needed	☐	☐
20.	Lower extremities • Inspects, palpates and assesses distal motor, sensory and circulatory functions	☐	☐
21.	Upper extremities • Inspects, palpates and assesses distal motor, sensory and circulatory functions	☐	☐
22.	Posterior thorax, lumbar and buttocks • Inspects and palpates posterior thorax • Inspects and palpates lumbar and buttocks areas	☐	☐
VITAL SIGNS			
23.	Obtains baseline vital signs (must include BP, P and R) • Includes temperature if patient is a potential TXA recipient	☐	☐
24.	Manages secondary injuries and wounds appropriately	☐	☐
25.	Verbalizes how and when to reassess the patient	☐	☐
REASSESSMENT			
26.	Reassess/Document: • Patient • Lung sounds • SpO2 and CO_2 monitoring • Patient tolerance/response to intervention	☐	☐
Notes:			

Pulse Oximetry

INDICATIONS

Chief complaint of respiratory, cardiovascular and neurological complications

Abnormal vital signs

Trauma patients

Any patient that would benefit from monitoring

CONTRAINDICATIONS

- No contraindications

CONSIDERATIONS

Remove nail polish if necessary; alcohol prep may be used for this

Pulse Oximetry

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- PPE
- Pulse oximetry sensor
- Monitor with SpO_2 capabilities

Assessment/Treatment indicators:

Indications	**Contraindications**
• Patient complaints of respiratory, cardiovascular and neurological complications • Abnormal vital signs • Trauma patients • Any patient, medic feels would benefit from monitoring	• No contraindications

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Explains procedure	☐	☐
5.	Gathers appropriate equipment (monitor, pulse oximetry sensor)	☐	☐
6.	Removes nail polish as needed	☐	☐
7.	Applies adhesive sensor or clip sensor to finger	☐	☐
8.	Utilizes monitor to provide pulse oximetry reading (normal = 94% - 98%)	☐	☐
9.	Reassess/Document: • Patient • Lung sounds • Placement verification • SpO2 and CO_2 monitoring • Patient response/tolerance to intervention	☐	☐

Notes:

Subcutaneous Medication Administration

INDICATIONS

- Desired route for administration of medication

CONTRAINDICATIONS (Relative)

If any of the following are noted at the site select a different site:

- Evisceration
- Masses
- Tenderness
- Bruising
- Infection
- Abrasions
- Swelling

Subcutaneous Medication Administration

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

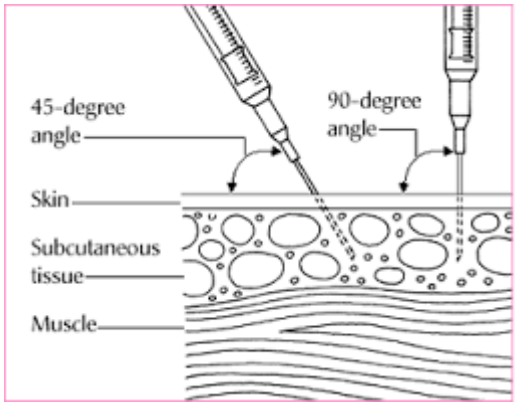
- BSI equipment
- Syringe
- Alcohol Prep
- Safety Needles (25g 1/2 -7/8 inch)
- Bandage

Assessment/Treatment indicators:

Indications	**Contraindications (relative to site)**
• Desired route for administration of medication	• Evisceration • Masses • Tenderness • Bruising • Infection • Abrasions • Swelling

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindication	☐	☐
3.	Prepares and checks equipment	☐	☐
4.	Explains procedure to patient/family	☐	☐
5.	Chooses and inspects desired site for contraindications Back of the upper arm (humeral region) Upper outer aspect of thigh	☐	☐
6.	Chooses appropriate medication	☐	☐
7.	Withdraws medication	☐	☐
8.	Positions patient and prepares site	☐	☐
9.	Remove air from syringe (Push slightly on the plunger to bring a drop of solution to the level of the bevel of the needle)	☐	☐
10.	Support the muscle to be injected (Without contaminating the site pinch skin with non-dominant hand)	☐	☐
11.	Inserts needle into the site at 45^{o} angle, stabilizes hub of syringe and aspirates for no blood return (no blood return indicates proper placement)	☐	☐
12.	Slowly injects medication to reduce pain and tissue trauma	☐	☐
13.	Withdraws needle and properly disposes needle and syringe	☐	☐

14.	Applies direct pressure, massages site and applies bandage as needed	☐	☐
15.	Reassess/Document: • Patient • Medication and dosage given • Administration success • Patient response/tolerance to intervention	☐	☐
Notes:			



http://www.ada-diabetes-management.com/administer-subcutaneous-injection/

Continuous Positive Airway Pressure Device (CPAP)

INDICATIONS

Awake, alert patient able to follow commands in severe respiratory distress as evidenced by:

Respiratory rate ≥ 24 breaths per minute and/or
SpO2 less than 90% and/or
Accessory muscle use

CONTRAINDICATIONS

- Apnea
- Unconscious
- Pediatric (appearing to be less than 15 years of age)
- Suspected pneumothorax
- Vomiting
- Systolic blood pressure 90 mmHg or less (relative contraindication)

CONSIDERATIONS

No considerations

Continuous Positive Airway Pressure Device (CPAP)

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- CPAP mask
- CPAP circuit or device
- Cardiac monitor
- Oxygen tank with spare available
- Capnography monitoring device

Assessment/Treatment indicators:

Indications	**Contraindications**
Awake, alert patient able to follow commands in severe respiratory distress as evidenced by: • Respiratory rate ≥ 24 breaths per minute and/or • SpO2 less than 90% and/or • Accessory muscle use	• Apnea • Unconscious • Pediatric (appearing younger than 15 years old) • Suspected pneumothorax • Vomiting • Systolic blood pressure 90 mmHg or less (relative contraindication)

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment Checks the "five patient rights, plus one" • Right patient • Right medication **D**-Dose/Drug • Right dose **I**- Integrity of packaging • Right route **C**-Clarity of solution • Right time **E**-Expiration Date • Allergies	☐	☐
4.	Explains procedure	☐	☐
5.	Provides supplemental oxygen as clinically indicated	☐	☐
6.	Positions patient sitting upright	☐	☐
7.	Assembles CPAP mask, circuit and device	☐	☐
8.	Applies mask and begins CPAP at 0-2cm H_2O (or lowest level allowed by the device); instruct patient to inhale through nose and exhale through mouth	☐	☐
9.	Slowly titrates in 3cm increments up to maximum of 15cm H_2O according to patients tolerance while instructing patient to continue exhaling against increasing pressure	☐	☐
10.	Attaches ET CO_2 monitoring device	☐	☐

11.	Verbalizes understanding of CPAP being continued until patient is placed on CPAP device at the receiving hospital Emergency Department (ED)	☐	☐
12.	Reassess/Document: • Patient work of breathing, level of anxiety, and level of comfort • CPAP level /reading • O_2 saturation, vital signs, lung sounds • Capnography monitoring • Patient tolerance/response to intervention	☐	☐
Notes:			

End Tidal Capnography Monitoring Device

INDICATIONS

***** MANDATORY: to rule out esophageal intubation and confirm and monitor endotracheal tube position in all intubated patients.***

To identify endotracheal tube dislodgement
To assist in monitoring ventilation and perfusion in all ill or injured patients
To monitor quality of chest compressions
To confirm ROSC
To monitor status of asthmatic, CHF, COPD, PE patient

CONTAINDICATIONS

- No considerations

CONSIDERATIONS

In cases of suspected head trauma (signs of herniation), maintain ET CO_2 between 30-35mmHg (figure 1).

Aggressive hyperventilation should be avoided in all patients

End Tidal Capnography Monitoring Device

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

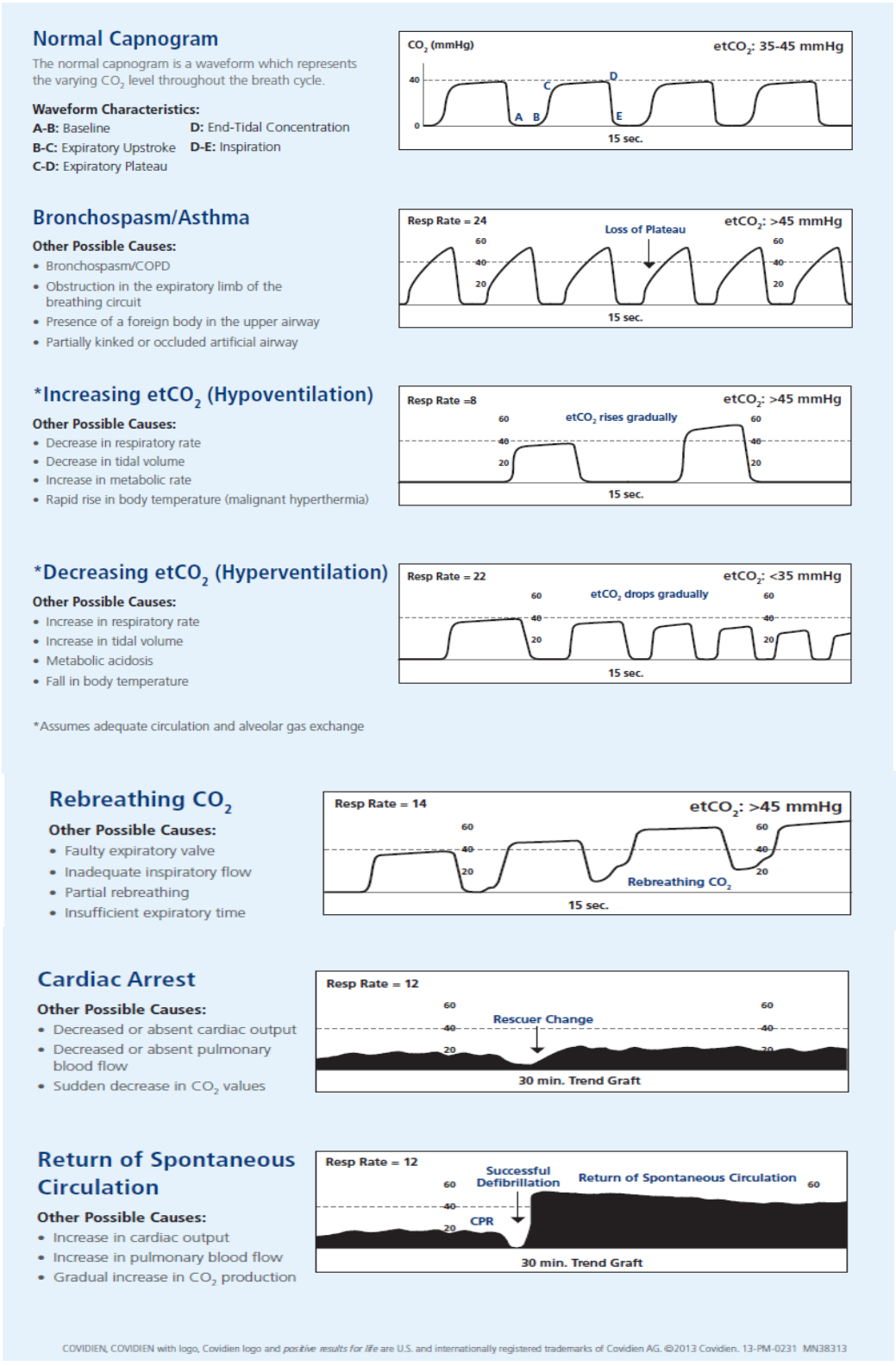
- PPE
- Cardiac monitor
- Oxygen device
- ET CO2 cable with sensor

Assessment/Treatment indicators:

Indications	**Contraindications**
• ***MANDATORY:*** *to rule out esophageal intubation or confirm and monitor endotracheal tube position in all intubated patients.* • To monitor quality of chest compressions • To confirm ROSC • To identify endotracheal tube dislodgement. • To assist in monitoring respiration, metabolism and perfusion in ill or injured patients • To monitor the status of an asthmatic, CHF, COPD, PE patient	• No contraindications

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Explains procedure	☐	☐
5.	Attaches the capnography sensor to the endotracheal tube or oxygen delivery device without increasing dead space	☐	☐
6.	If not previously attached, attaches the ET CO2 connector to the cardiac monitor	☐	☐
7.	Ideally, maintains ET CO2 output between 35-45 mmHg	☐	☐
8.	If suctioning is required, takes caution to not dislodge "T" sensor	☐	☐
9.	Reassess/Document: • Patient • Respiratory status • Intubation or oxygen delivery • ET CO_2 reading, waveform and respiratory rate • Patient response/toleration to intervention	☐	☐

Notes:



Normal Capnogram

The normal capnogram is a waveform which represents the varying CO_2 level throughout the breath cycle.

Waveform Characteristics:

A-B: Baseline
B-C: Expiratory Upstroke
C-D: Expiratory Plateau
D: End-Tidal Concentration
D-E: Inspiration

Bronchospasm/Asthma

Other Possible Causes:

- Bronchospasm/COPD
- Obstruction in the expiratory limb of the breathing circuit
- Presence of a foreign body in the upper airway
- Partially kinked or occluded artificial airway

*Increasing $etCO_2$ (Hypoventilation)

Other Possible Causes:

- Decrease in respiratory rate
- Decrease in tidal volume
- Increase in metabolic rate
- Rapid rise in body temperature (malignant hyperthermia)

*Decreasing $etCO_2$ (Hyperventilation)

Other Possible Causes:

- Increase in respiratory rate
- Increase in tidal volume
- Metabolic acidosis
- Fall in body temperature

*Assumes adequate circulation and alveolar gas exchange

Rebreathing CO_2

Other Possible Causes:

- Faulty expiratory valve
- Inadequate inspiratory flow
- Partial rebreathing
- Insufficient expiratory time

Cardiac Arrest

Other Possible Causes:

- Decreased or absent cardiac output
- Decreased or absent pulmonary blood flow
- Sudden decrease in CO_2 values

Return of Spontaneous Circulation

Other Possible Causes:

- Increase in cardiac output
- Increase in pulmonary blood flow
- Gradual increase in CO_2 production

NORMAL RANGES:

CAPNOG: 35-45mmHg
pH: 7.35 – 7.45
PCO_2: 35-45mmHg
•CO_2 is an ACID
HCO_3: 22-28mmol/L
•Bicarb regulates pH

5mL is the maximum airflow to be used with the capnography cannula or the sampling will be diluted and incorrect (wash out)

Capnography cannulas CAN BE USED with CPAP masks. The masks are designed to properly seal with a nasal capnography adjunct in place

An elevated RR may be due to the buildup of CO_2; the body compensates by blowing off this acid

Figure 1

With capnography, one can monitor Respiration, Metabolism and Perfusion

It is imperative to have capnography in place to measure the FIRST (assisted or unassisted) breath to establish a baseline for each patient.

External Jugular Vein Access

INDICATIONS

Patient condition requires IV access and other peripheral IV access attempts are unsuccessful.

CONTRAINDICATIONS

- Patient eight (8) years of age or younger

CONSIDERATIONS

No considerations

External Jugular Vein Access

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- Appropriately sized IV catheter
- Alcohol swabs
- Occlusive dressing
- IV tubing/fluids (if indicated)

Assessment/Treatment indicators:

Indications	**Contraindications**
• Patient condition required IV access and other peripheral IV access attempts are unsuccessful	• Patient eight (8) years of age or less

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Checks the "five patient rights, plus one" • Right patient • Right medication **D**-Dose/Drug • Right dose **I**- Integrity of packaging • Right route **C**-Clarity of solution • Right time **E**-Expiration Date • Allergies	☐	☐
5.	Explains procedure	☐	☐
6.	Utilizes axial spinal stabilization in trauma patients. (f not in axial spinal stabilization, extend and stabilize patient's neck); maintain manual axial spinal stabilization if the need to remove c-collar arises	☐	☐
7.	Places patient in Trendelenburg position or apply slight pressure at base of vein for tourniquet effect	☐	☐
8.	Obtains external jugular vein access with appropriately sized IV catheter	☐	☐
9.	Securely tapes catheter with occlusive dressing in place and continue to monitor for patency	☐	☐
10.	Rechecks site frequently for signs of infiltration	☐	☐
11.	Reassess/Document: • Patient EJ IV placement and s/s of infiltration • Patient tolerance/response to intervention	☐	☐

Notes:

Intraosseous Insertion/Infusion (IO)

INDICATIONS

Primary vascular access in cardiac patients eight (8) years of age and younger
Any patient where venous access is unavailable by any other mean

CONTRAINDICATIONS

- Fracture of target bone
- Previous IO attempt and marrow entry at target site
- Infection at target site
- Severe burn to the extremity
- Crush injuries
- Known bone disease

CONSIDERATIONS

Anterior distal femur, 2cm above the patella; base station order (Figure 1)
Lidocaine for pain control
Pressure infusion device

Intraosseous Infusion

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- PPE
- IV Solution
- IV administration set
- 3-way stopcock
- IO needle/driver (25mm, 45mm)
- Povidone – iodine OR
- Chlorhexidine skin cleaner
- Extension tubing
- Sharps container
- Tape
- Splint
- Pressure infuser or BP cuff
- Syringe
- Sterile gauze pads

Assessment/Treatment indicators:

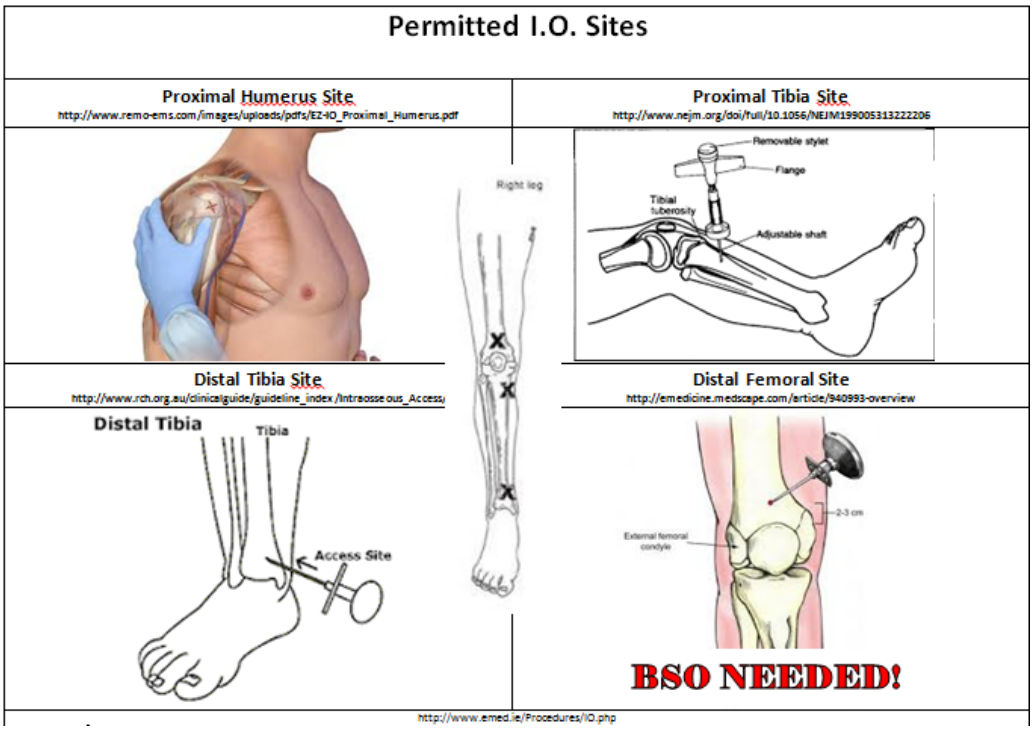
Indications	**Contraindications**
• Primary vascular access in cardiac patients eight (8) years of age and younger • Any patient where venous access Is unavailable by any other means	• Fracture to the target bone • Previous IO attempt and marrow entry at target site • Severe burn to the extremity • Crush injuries • Known bone disease • Infection at target site

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Checks the "five patient rights, plus one" • Right patient • Right medication **D**-Dose/Drug • Right dose **I**- Integrity of packaging • Right route **C**-Clarity of solution • Right time **E**-Expiration Date • Allergies	☐	☐
5.	Selects appropriate solution/administration set • Prepares IO and attaches 3-way stopcock (as needed), extension tubing, and syringe	☐	☐
6.	Selects the appropriate sized needle for insertion • Attaches needle to driver	☐	☐
7.	Select the appropriate site of insertion and cleans with selected skin cleanser a) **Anterior medial aspect of the proximal tibia** – approximately 1-3cm below the tibial tuberosity (preferred site for pediatrics eight (8) years of age and younger) b) **Anterior medial malleolus (distal tibia)** – approximately 1-3cm above	☐	☐

	the medial malleolus (one of the preferred site for adults nine (9) years of age and older) c) **Proximal humeral head** – approximately 1-3cm from the humeral tuberosity when the hand is rotated inward toward the body (adults nine (9) years of age and older only) d) **Distal Femur** – approximately 1-3cm above the distal head **** *Base Station Order (BSO) only***		
8.	Explains procedure	☐	☐
9a.	Insertion (EZ-IO): a. **Anterior Tibia** (example) • Swabs dominant hand with Povidone-iodine and relocate the landmark, with other hand stabilizing the leg • Positions the IO needle and driver perpendicular to the patient's leg (90-degree angle) • Inserts the needle through the skin to the bone until the needle rests against the bone • Visualizes the 5mm mark above the skin • Depresses the trigger on driver to insert IO needle until there is a sudden decrease of resistance (or "pop") • Removes the driver and the stylet; ensures proper disposal • Attaches primed IV extension tubing to hub of needle	☐	☐
9b.	Insertion (manual): a. **Anterior Tibia** (example) • Swabs dominant hand with Povidone-iodine and relocate the landmark while stabilizing the leg • Positions the IO needle perpendicular to the patient's leg (90-degree angle) • Applies downward pressure in a twisting motion perpendicular to the surface of the target site • Upon entrance into medullary cavity, slightly advances needle 1-2cm	☐	☐
10.	Confirms IO placement • Loss of resistance on insertion • Needle free standing • IO flushes freely • Aspiration of blood/marrow • No extravasation	☐	☐
11.	Secures IO • Leaves site uncovered, hinges tubing to extremity with tape	☐	☐
12.	Pain control for conscious patients • Utilize 2% Lidocaine ▪ Primes extension tubing with 0.5 mg/kg of 2% Lidocaine and infuse slowly (over 2 minutes), not to exceed 40mg	☐	☐
13.	Determines how IV fluid/medication may be administered: • Using a syringe, pressure device or B/P cuff	☐	☐
14.	Reassess/Document: • Patient • Placement/size/site for signs of extravasation	☐	☐

	• Medication: dose, time, route/location, • Patient response/tolerance to intervention		
Notes:			

Figure 1



Nasogastric/Orogastric Tube Insertion

INDICATIONS

Any intubated patient where gastric distention may impede ABC's
ALL intubated pediatric patients
Oral route for patients with mid-facial trauma and all patients less than six (6) months of age
Conscious with continuous vomiting and inability to maintain airway

CONTRAINDICATIONS (Relative)

- History of esophageal strictures, varices and/or other esophageal disease
- Caustic ingestion
- Significant facial or head trauma
- History of bleeding disorders

CONSIDERATIONS

No considerations

Nasogastric/Orogastric Tube Insertion

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- PPE
- Naso/Orogastric tube (appropriately sized)
  - Adult 16-18fr
  - Pediatric 8-10fr
  - Infant 5-6fr
- Water soluble lubricant or viscous Lidocaine gel
- 30-60 ml syringe
- Suction Setup
- Emesis Basin
- Tape

Assessment/Treatment indicators:

Indications	**Relative Contraindications**
• Any intubated patient where gastric distention may impede ABC's • Oral route for patients with mid-facial trauma and all patients less than six (6) months of age • Conscious with continuous vomiting and unable to support airway	• History of esophageal strictures, varices and/or other esophageal disease • Caustic ingestion • Significant facial or head trauma • History of bleeding disorders

	Procedure:	**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Checks the "five patient rights, plus one" • Right patient • Right medication **D**-Dose/Drug • Right dose **I**- Integrity of packaging • Right route **C**-Clarity of solution • Right time **E**-Expiration Date • Allergies	☐	☐
5.	Selects appropriate size OG/NG tube	☐	☐
6.	Explains procedure	☐	☐
7.	Insertion	☐	☐
7a.	Position patient in high Fowlers unless otherwise contraindicated or unconscious	☐	☐
7b.	Measure and mark the gastric tube for proper insertion length; have suction equipment and emesis basin readily available • **Nasogastric** – combined distance between the tip of the nose to the ear lobe to the xiphoid process • **Orogastric** – combined distance between the corner of the mouth to the	☐	☐

	ear lobe to the xiphoid process		
7c.	Examine both nares to determine nare with best airflow or examine oropharyngeal cavity for obstructions or secretions	☐	☐
7d.	Lubricate distal third of the gastric tube with a water-soluble lubricant or viscous Lidocaine gel	☐	☐
7e.	Gently pass the tube posteriorly along the floor of nasal or oral cavity	☐	☐
7f.	Instruct patient to swallow (if conscious)	☐	☐
7g.	If resistance is met while using nasal route, remove and attempt the other nostril	☐	☐
7h.	Slowly rotate and advance tube during insertion until pre-designated mark is at tip of nose or corner of mouth	☐	☐
8.	Confirm proper tube placement • Aspiration of stomach contents • Injection of 30-60ml of air into tube and auscultate for the sound of air over the epigastric region	☐	☐
9.	Secure tube to bridge of nose or to side of mouth	☐	☐
10.	Attach gastric tube to suction tubing and adjust to low suction or other type of approved suction device	☐	☐
11.	Reassess/Document: • Patient • Placement/size, attempts • Medication administered • Dose	☐	☐
Notes:			

Needle Cricothyrotomy

INDICATIONS

Upper airway obstruction with severe respiratory distress

When unable to ventilate utilizing conventional airway maneuvers or devices

CONTRAINDICATIONS

Transection of distal trachea:

- **Symptoms:** respiratory distress, hoarseness, dysphonia (inability to produce voice sounds), cough, noisy breathing and stridor, dysphagia (inability to swallow)
- **Physical signs:** abnormal laryngeal contour, subcutaneous emphysema, cervical ecchymosis, hemoptysis (the coughing of blood from the respiratory tract below the level of the larynx)

Patient less than two (2) years of age

CONSIDERATIONS

Inline cervical stabilization as needed

Needle Cricothyrotomy

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- PPE
- NRB mask with 100% oxygen
- Adult 10-15gauge needle
- Pediatric 12-15gauge needle
- Cannula adaptor
- Syringe
- BVM or Translaryngeal Jet Ventilation (TLJV) device
- Optional: 3-way stopcock or y-connector
- End-tidal CO_2 and Pulse Oximetry

Assessment/Treatment indicators:

Indications	**Contraindications**
• Upper airway obstruction with severe respiratory distress • When unable to ventilate utilizing conventional airway maneuvers or devices	• Transection of distal trachea • Patient less than two (2) years of age

	Procedure:	**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Explains procedure	☐	☐
5.	Supports ventilations, use inline cervical stabilization as needed	☐	☐
6.	Pre-oxygenates and place patient in supine position prior to attempting procedure	☐	☐
7.	Locates the soft cricothyroid membrane between the thyroid and cricoid cartilage	☐	☐
8.	Holds the trachea in place and provide skin tension with the thumb and middle finger of the non-dominant hand placed on either side of the trachea	☐	☐
9.	Uses the index finger to palpate the cricothyroid membrane	☐	☐
10.	Places the needle in the midline of the neck at the inferior margin of the cricothyroid membrane (to avoid the cricothyroid blood vessels located superiorly and laterally) • Directing it caudally (toward the feet) at an angle of 30 to 45 degrees	☐	☐
11.	Punctures the skin and subcutaneous tissue. Advance the needle while continuously applying negative pressure on the syringe, until air bubbles are seen, confirming intratracheal placement	☐	☐
12.	Advances the catheter forward off the needle until its hub rests at the skin surface	☐	☐
13.	Removes the needle, attach a syringe and aspirate for air to confirm that the catheter remains in the trachea	☐	☐

14.	Attaches cannula adaptor to BVM or use Translaryngeal Jet Ventilation (TLJV) device and ventilate with either BVM or TLJV • One (1) second on and three (3) seconds off	☐	☐
15.	Secures device	☐	☐
16.	Reassess/Document: • Patient • Placement • Lung sounds • Chest expansion • SpO2 and ET CO_2 • Patient response/tolerance (if conscious) to intervention	☐	☐
Notes:			

Needle Thoracostomy

INDICATIONS

Progressively worsening dyspnea/cyanosis
Decreased or diminished breath sounds on the affected side
Hypotension
Increased agitation
Distended neck veins
Tracheal deviations away from the affected side

CONTRAINDICATIONS

- No contraindications

CONSIDERATIONS

Determine position for conscious and unconscious patient
If conscious, place the patient in an upright position if able to tolerate
If patient is unconscious or in axial-spinal immobilization, leave supine
Determine best site:

- 2nd Intercostal space at the mid-clavicular line or the alternative site, at the 4th intercostal space, mid-axillary
- Caution should be exercised in the later stages of pregnancy; a higher (3^{rd}) intercostal space should be used to avoid injury to the liver or spleen

Needle Thoracostomy

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- PPE
- Needle Thoracostomy Kit; or
- 14 or 16 gauge 3.25 inch needle (pts >50 kg); or
- 18-gauge needle 1.5-inch needle (pts <50 kg)
- Antiseptic wipes
- Flutter valve
- End tidal CO_2 monitoring device
- BVM
- Tape

Assessment/Treatment indicators:

Indications	**Contraindications**
• Progressively worsening dyspnea/cyanosis • Decreased or diminished breath sounds on the affected side • Hypotension • Increased agitation • Distended neck veins • Tracheal deviations away from the affected side	• No contraindications

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Explains procedure	☐	☐
5.	Preps chosen site with antiseptic wipes	☐	☐
6.	Inserts needle perpendicular to the chest wall at the level of the superior boarder of the third rib until pleura is penetrated as indicated by one or more of the following: • A rush of air • Ability to aspirate free air into the syringe	☐	☐
7.	Removes the syringe and needle stylet and leave cannula in place	☐	☐
8.	Adds flutter valve	☐	☐
9.	Secures needle hub in place with tape or other device	☐	☐
10.	Reassess/Document: • Patient • Placement/location • Lung sounds, respiratory status, SpO2 and CO_2 monitoring	☐	☐

	• Patient response/tolerance to intervention		
Notes:			

Oral Endotracheal Intubation

INDICATIONS

Unresponsive and apneic patient

Agonal or failing respirations and/or no gag reflex present

Prolonged ventilation is required and adequate ventilation cannot otherwise be achieved

CONTRAINDICATIONS

- Suspected ALOC (initially)

CONSIDERATIONS

Utilize cervical stabilization as needed

Select appropriately sized endotracheal intubation tube

Consider prophylactic Lidocaine 1.5 mg/kg IVP for suspected head/brain injury

Oral Endotracheal Intubation

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- PPE
- Endotracheal Intubation Tube *(appropriately sized for age group)*
- Stylet
- Laryngoscope
- End tidal CO_2 monitoring device
- BVM
- Tape
- Lidocaine IV (if indicated)

Assessment/Treatment indicators:

Indications	**Contraindications**
• Unresponsive and apneic patient • Patient with agonal or failing respirations, and/or no gag reflex • Prolonger ventilation is required and adequate ventilation cannot otherwise be achieved	• Suspected ALOC (initially)

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Checks the "five patient rights, plus one" • Right patient • Right medication **D**-Dose/Drug • Right dose **I**- Integrity of packaging • Right route **C**-Clarity of solution • Right time **E**-Expiration Date • Allergies	☐	☐
5.	Selects appropriate sized ET tube	☐	☐
6.	Explains procedure	☐	☐
7.	Insertion	☐	☐
7a.	Supports ventilations with appropriate basic airway adjuncts	☐	☐
7b.	Immediately prior to intubation, consider prophylactic Lidocaine 1.5 mg/kg IVP for suspected head/brain injury	☐	☐
7c.	Visualizes the vocal cords with the laryngoscope. Watch as the tube passes through the vocal cords. Advance the tube until the vocal cord marker is situated beyond the vocal cords. Placement efforts must stop after twenty (20) seconds for ventilation	☐	☐

7d.	After three (3) attempts, consider alternative airway access	☐	☐
7e.	Inflates the balloon to the point where no air leak can be heard	☐	☐
7f.	Listens for bilateral breath sounds, resume ventilation with 100% oxygen and secure airway	☐	☐
8.	Reassess/Document: • Patient • Lung sounds • Placement verification • SpO2 and CO_2 monitoring • Patient response to intervention	☐	☐
Notes:			

Synchronized Cardioversion

INDICATIONS

Unstable ventricular tachycardia or wide complex tachycardias (sustained)
Unstable narrow complex tachycardias

CONTRAINDICATIONS

- Patient eight (8) years of age and younger

CONSIDERATIONS

In typical pad placement, assess for:

- Transdermal medication patches (remove if found, wipe area clean)
- Implanted medical devices (avoid placing pads over devices or jewelry)

If patient's condition permits administer sedative medication for conscious patients with signs of adequate tissue perfusion:

- **MIDAZOLAM** 2 mg slow IV/IO push or via intranasal route

- **FENTANYL** 50 mcg slow IV/IO over one (1) minute (initial dose)
  In five (5) minutes subsequent doses may be repeated titrating to pain; not to exceed 200mcg total via IV/IO routes

  OR

- **FENTANYL** 100 mcg total, via intranasal (IN) or intramuscular (IM) route.
  If patient is medicated intranasally, 50 mcg may be repeated every ten (10) minutes; titrate to pain, do not exceed 200 mcg total regardless of route given.

Synchronized Cardioversion

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- Pacing/Defibrillator pads
- PPE
- Cardiac monitor
- Midazolam (if indicated)
- Fentanyl (if indicated)

Assessment/Treatment indicators:

Indications	**Contraindications**
• Unstable ventricular tachycardia or wide complex tachycardias (sustained) • Unstable narrow complex tachycardias	• Patient less than eight (8) years of age

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Checks the "five patient rights, plus one" • Right patient • Right medication **D**-Dose/Drug • Right dose **I**- Integrity of packaging • Right route **C**-Clarity of solution • Right time **E**-Expiration Date • Allergies	☐	☐
5.	Explains procedure	☐	☐
6.	Applies defibrillation pads	☐	☐
7.	Selects initial energy level setting at 100 joules or a clinically equivalent biphasic energy level per manufacture guidelines (procedure may be repeated at 200, 300 and 360 joules or a clinically equivalent biphasic energy level per manufacturer guidelines)	☐	☐
8.	Sets monitor/defibrillator to synchronized cardioversion mode	☐	☐
9.	Makes certain all personnel are clear of patient	☐	☐
10.	Presses and holds the shock button to cardiovert (stays clear of the patient until you are certain the energy has been delivered)	☐	☐
11.	Assesses patient response and perform immediate defibrillation if the patient's rhythm has deteriorated into pulseless ventricular tachycardia or ventricular fibrillation	☐	☐

12.	Considers Midazolam 2mg slow IV/IO or 2mg IN/IM if patient is awake and alert and exhibits signs of adequate tissue perfusion	☐	☐
13.	Considers Fentanyl 50mcg IV/IO or 100mcg IN/IM to max of 200mcg for patient with complaint of pain and signs of adequate tissue perfusion	☐	☐
14.	Reassess/Document: • Patient • Initial and post conversion cardiac rate/rhythm • Medication administration • Patient response/tolerance to intervention	☐	☐
Notes:			

Transcutaneous Cardiac Pacing

INDICATIONS

Symptomatic Bradycardia

CONTRAINDICATIONS

- Patient less than eight (8) years of age
- Asystole

CONSIDERATIONS

Consider sedative medication for conscious patients with signs of adequate tissue perfusion:

- **MIDAZOLAM** 2mg slow IV/IO push or via intranasal route

- **FENTANYL** 50mcg slow IV/IO over one (1) minute (initial dose)
  In five (5) minutes subsequent doses may be repeated titrating to pain; not to exceed 200mcg total via IV/IO routes

  OR

- **FENTANYL** 100mcg total, via intranasal (IN) or intramuscular (IM) route
  If patient is medicated intranasally, 50mcg may be repeated every ten (10) minute; titrate to pain, do not exceed 200mcg total regardless of route given

Transcutaneous Cardiac Pacing

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- Pacing/defibrillator pads
- PPE
- Cardiac monitor
- Midazolam (if indicated)
- Fentanyl (if indicated)

Assessment/Treatment indicators:

Indications	**Contraindications**
• Symptomatic Bradycardia	• Patient less than eight (8) years of age • Asystole

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Checks the "five patient rights, plus one" • Right patient • Right medication **D**-Dose/Drug • Right dose **I**- Integrity of packaging • Right route **C**-Clarity of solution • Right time **E**-Expiration Date • Allergies	☐	☐
5.	Explains procedure	☐	☐
6.	Applies pacing pads	☐	☐
7.	Starts pacing at lowest setting available on monitor until capture is noted at a rate of 60	☐	☐
8.	Assesses peripheral pulses to confirm correlation with paced rhythm (reassesses patient for signs of adequate tissue perfusion)	☐	☐
9.	Determines lowest threshold by turning the output control down until capture is lost, and then turn it back up slightly until capture is noted again (maintains this capture)	☐	☐
10.	Assesses peripheral pulses and confirm correlation with paced rhythm (reassesses patient for signs of adequate perfusion)	☐	☐
11.	Considers Midazolam 2mg slow IV/IO or 2mg IN/IM if patient is awake and alert and exhibits signs of adequate tissue perfusion	☐	☐

12.	Considers Fentanyl 50mcg IV/IO or 100mcg IN/IM to max of 200mcg for patient with complaint of pain and signs of adequate tissue perfusion	☐	☐
13.	Reassess/Document: • Patient • Initial and post procedural cardiac rate/rhythm • Capture threshold; rate and amperes • Medication administration • Patient response/tolerance to intervention	☐	☐
Notes:			

Vagal Maneuvers (Valsalva)

INDICATIONS

Stable narrow complex tachycardias

RELATIVE CONTRAINDICATIONS

- Hypertension
- Suspected acute MI
- Suspected head/brain injury

CONSIDERATIONS

No considerations

Vagal Maneuvers (Valsalva)

Skills Test

Examinee: _____ Date: _____

Examiner: _____ Pass ☐ Pass/Counsel ☐ Fail ☐

Equipment:

- Cardiac monitor
- SpO_2 monitor
- 10ml syringe or straw
- Ice water or cold wash

Assessment/Treatment indicators:

Indications	**Contraindications**
• Stable narrow complex tachycardias	• Hypertension • Suspected acute MI • Suspected head/brain injury

Procedure:		**Yes**	**No**
1.	Scene safety awareness/PPE usage	☐	☐
2.	States indications/contraindications	☐	☐
3.	Prepares/checks equipment	☐	☐
4.	Checks the "five patient rights, plus one" • Right patient • Right medication **D**-Dose/Drug • Right dose **I**- Integrity of packaging • Right route **C**-Clarity of solution • Right time **E**-Expiration Date • Allergies	☐	☐
5.	Have patient perform one of the following techniques: a. Pinch nostrils together, close mouth and blow against their closed glottis b. Bear down as if having a bowel movement c. Submerge face in water or apply cold wet washcloth against face (preferred method for infants) d. Blow through straw or 10ml syringe	☐	☐
6.	All procedures should be performed until arrhythmia is terminated or a maximum of ten (10) seconds has passed; consider sync cardioversion	☐	☐
7.	Reassess/Document: • Patient • Initial cardiac rate/rhythm • Subsequent cardiac rate/rhythm • Medication administration • Patient response/tolerance to intervention	☐	☐

Notes:

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